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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,260	12/20/2000	Peter Phaal	21906-702	8339

7590 05/17/2005  
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EXAMINER

TSEGAYE, SABA

ART UNIT PAPER NUMBER

2662

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/745,260	<b>Applicant(s)</b> PHAAL, PETER	
	<b>Examiner</b> Saba Tsegaye	<b>Art Unit</b> 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This is a response to the amendment filed 12/06/04. Claims 1-5 and 7-45 are pending. Currently no claims are in condition for allowance.

### ***Claim Objections***

2. Claim 31 is objected to because of the following informalities: claim 31 is identical with claim 30. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. Claims 1-5, 10-22, 26-38 and 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Pendleton et al. (USPN 5,982,753), hereafter referred to as Pendleton.

Referring to claims 1 and 14, Pendleton discloses a method of monitoring a network switch (14) (a method of monitoring a switch using test equipment (see figures 1-3 and column 5), having a plurality of regular ports and a mirror port (see ports 11, 12, 16, 20 and 22 in figures 1 and 2), between which network traffic data packets are forwarded and a mirror port (traffic sent between nodes of the LAN are IP packets (see columns 1 and 5)) comprising:

selecting at least one of said regular ports (a port is selected to connect the test equipment; also see item 200 in Fig. 6)

mirroring a data packet of the selected port to said mirror port (the test equipment uses passive monitoring to receive packets that are transported between network nodes (all traffic exchanged between two ports is forwarded to the port tap 12; the test equipment uses passive

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monitoring to receive packets that are transported between network nodes (see columns 5 and 7));

extracting the network address information of said mirrored data packet (capturing the network traffic traveling between the network devices (column 5, lines 19-23 &); test equipment uses passive monitoring to perform a discovery process which allows the test equipment to extract MAC and/or IP address from the passively monitored packets (see figure 6 and columns 5 and 7));

determining port information of said network address information ((fig.1, when traffic captured that traveled between the network devices, it is inherent to determine port information in order to forward the data packet to the destination); further the test equipment uses MIBs to build a port table (see item 47 in figure 5)) and

performing network analysis of said network switch (the test equipment analyzes reports regarding the ports and related traffic through the switch (see column 8; column 5, lines 19-27)).

Referring to claims 2 and 15, Pendleton discloses that said port information refers to physical information of said network address information in said network switch (the port number corresponds to the physical port that the network node is attached to (see figures 2 and 3)).

Referring to claims 3 and 36, Pendleton discloses that said port information determination comprises interrogating said switch to obtain said port information using said

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network address information (the switches MIBs can also be requested in order to build the port table (see column 7 and figure 5)).

Referring to claims 4 and 37, Pendleton discloses that said interrogating step comprising sending a first request to said network switch requesting a port index corresponding to said network address information (the test equipment queries the switch using SNMP in order to get MIBs that show port information (see columns 6 and &)) and sending a second request to said network switch requesting said port information corresponding to said port index (various MIBs can be selected which show the port information (see figure 5)).

Referring to claims 5 and 38, Pendleton discloses that said first request and said second request are SNMP requests (the test equipment requests the MIBs from the switch using SNMP queries (see column 6)).

Referring to claims 10, 26 and 42, Pendleton discloses maintaining at least one lookup table correlating said network address information with said port information (a port table is maintained (see item 47 in figure 5)).

Referring to claims 11 and 12, Pendleton discloses that said network address information comprises source address and the destination address of said mirrored data packet (the passive discovery process includes the test equipment receiving IP packets that have been transmitted using the TCP/IP protocol and it is part of this standard to have the source and destination

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addresses of the packet included in each packet to allow for proper routing, thus the packets received by the test equipment have the source and destination addresses of where that packet came from and where they are going to (see fig. 1 and columns 5-7)).

Referring to claims 13, 27 and 43, Pendleton discloses that said network switch is a routing switch (the switch routes packets over a switches network (see figures 1-3)).

Referring to claim 16, Pendleton discloses that said network switch having a plurality of regular ports and a mirror port (see ports 11,16,20 and 22 in figures 1 and 2), said mirror port being able to mirror network traffic for at least one of said regular ports (the test instrument can passively receive traffic that it transported between network nodes (see figures 1-3 and column 5)), wherein said portion of data packets are obtained from said mirror port (the switch and the test equipment are coupled to each other (see figures 1 and 2)).

Referring to claims 17, 18, 33 and 34, Pendleton discloses that said network address information comprises source address and the destination address of said data packet (the passive discovery process includes the test equipment receiving IP packets that have been transmitted using the TCP/IP protocol and it is part of this standard to have the source and destination addresses of the packet included in each packet to allow for proper routing, thus the packets received by the test equipment have the source and destination addresses of where that packet came from and where they are going to (see columns 5-7)).

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Referring to claim 19, Pendleton discloses that said network switch comprising a plurality of regular ports (the switch has a plurality of ports (see figures 1-3)), wherein said data packets are forwarded to said monitor device by passively tapping at least one of said regular ports (the test equipment passively taps into the switch (see figures 1-3 and columns 5 and 7)).

Referring to claim 20, Pendleton discloses that said determining step comprising: interrogating said switch to obtain said port information using said network address information (the switches MIBs can also be requested in order to build the port table (see column 7 and figure 5)).

Referring to claim 21, Pendleton discloses that said interrogating step comprising sending a first request to said network switch requesting a port index corresponding to said network address information (the test equipment queries the switch using SNMP in order to get Mms that show port information (see columns 6 and &)) and sending a second request to said network switch requesting said port information corresponding to said port index (various MDs can be selected which show the port information (see figure 5)).

Referring to claim 22, Pendleton discloses that said first request and said second request are SNMP requests (the test equipment requests the Mms from the switch uses SNMP queries (see column 5)).

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Regarding claim 28, Pendleton discloses a method to monitor a network switch, comprising:

obtaining at least a portion of data packets being handled by the network switch, wherein each of the data packets comprises network address information (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7&) fig. 1 shows; monitoring network traffic through mirror port 12);

extracting the network address information from the data packets (capturing the network traffic traveling between the network devices (column 5, lines 19-23 &); test equipment uses passive monitoring to perform a discovery process which allows the test equipment to extract MAC and/or IP address from the passively monitored packets (see figure 6 and columns 5 and 7)); and

determining port information of the network address information (when traffic captured that traveled between the network devices, it is inherent to determine port information in order to forward the data packet to the destination (see column 5, lines 19-23); further the test equipment uses MIBs to build a port table (see item 47 in figure 5)).

Regarding claim 29-31 Pendleton discloses that said port information refers to physical information of said network address information in said network switch (the port number corresponds to the physical port that the network node is attached to (see figures 2 and 3)).

Regarding claim 32, Pendleton discloses the method that said network switch having a plurality of regular ports (see Figs. 1-3) and a mirror port (11, 12), said mirror port being able to



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mirror network traffic for at least one of the regular ports, wherein said portion of data packets are obtained from said mirror port (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

Regarding claim 35, Pendleton discloses the method that said network switch comprising a plurality of regular ports (see figures 1-3), wherein said data packets are obtained by passively tapping at least one of said regular ports (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

Regarding claim 44, Pendleton discloses the method further comprising associating the port information with information contained in the data packets ((fig. 1, when traffic captured that traveled between the network devices, it is inherent to determine port information in order to forward the data packet to the destination); further the test equipment uses MIBs to build a port table (see item 47 in figure 5)).

Regarding claim 45, Pendleton discloses the method, further comprising performing network analysis of said network switch using said port information and associated data packet information (the test equipment uses passive monitoring to receive packets that are transported between network nodes (see columns 5 and 7)).

***Claim Rejections - 35 USC § 103***

4. Claims 7-9, 23-25 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pendleton in view of Niestegge (USPN 4,922,488), hereafter referred to as Niestegge.

Referring to claims 7-9 and 23-25, Pendleton does not disclose placing packets in a FIFO and releasing them from the FIFO after the SNMP response or after a predetermined time period.

However, Niestegge discloses a system wherein packets are stored in a FIFO and release after a particular time (see column 3 lines 20-60)).

It would have been obvious to one skilled in the art at the time of the invention to implement this feature into the Pendleton system because using the buffer would allow the system to wait for a response to the SNMP query made by the test equipment and furthermore FIFOs also provide an organized way of holding data so it is not lost, thereby making the Pendleton system more reliable.

***Response to Arguments***

5. Applicant's arguments filed 12/06/04 have been fully considered but they are not persuasive. Applicant argues (Remarks, page 9) that Fig.1 of Pendleton does not determine port information corresponding to the data packets within the network traffic. Examiner respectfully disagrees. Pendleton discloses a method that accommodates troubleshooting and analysis equipment by capturing the network traffic traveling between the network devices through mirror port 12. It is also inherent having the capability of determining port information corresponding to the data packets within the network traffic.

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Further, Applicant argues (Remarks, page 10) that test analyzer 100 of Pendleton does not determine port information by extracting network address information of data packets. Examiner respectfully disagrees. The test instrument using a set of SNMP queries, determines what MIBs are available in the switch. The MIBs provide more detailed statistical and error information on any particular port of switch (column 2, lines 55-67). This shows that the test instrument 100 obtain port information through MIBs (mirror through MIBs).

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST  
April 27, 2005

  
**JOHN PEZZLO**  
**PRIMARY EXAMINER**